Amendments to the Specification:

Please amend paragraph **[0056]** as follows:

[0056] Fig. 9 shows the engagement between the work gear 22 and the tool 42 for a conventional 6-axis machine. The tool spindle axis T is parallel with the X axis and thus to the machine base, and it is at right angles to the Y axis. The tool spindle axis T maintains this position during generating cutting on the conventional 6-axis machine. For compensation, as described above, the work gear spindle axis W must be moved in a machine root angle pivoting range. Four examples of this for four bevel gears to be machined are shown in Fig. 8.

Please amend paragraph **[0057]** as follows:

[0057] In the machine 10 according to the invention, the tilt angle κ selected is at least equal to the maximum value $\Delta\Gamma_{max}$ of all maximum machine root angle pivoting ranges occurring on a conventional 6-axis machine during machining of bevel gears. The maximum machine root angle Γ_{max} is reduced by the angle κ on the machine 10. In other words, in Fig. 10 the work gear 22 and the tool 42, which are engaging, are pivoted to the right around the pivot axis P by the angle κ, relative to the position in Fig. 9. Thus, on the machine according to the invention, the tool spindle axis T is no longer parallel with the X axis, but rather it is inclined by the angle κ, which is equal to the maximum machine root angle $\Delta\Gamma_{max}$. Therefore, the adjusted fixed angular position of the axis W of the work gear spindle 18, i.e. its machine root angle Γ, corresponds in Fig. 10 to an angle that equals the maximum machine root angle Γ_{max} resulting for a bevel gear to be machined on a conventional 6-axis machine, minus the tilt angle κ. Thus, on the novel machine, according to Fig. 10 the axis T of the tool 42 is inclined by the angle κ against the orientation axis O, which is at right angles to the Y axis. Accordingly, the work gear spindle axis W lies closer by the angle κ to the Y axis, so that the work gear 22 and the tool 42 engage in Fig. 10 as they do in Fig. 9. In Fig. 10, the tilt angle κ can be seen in its actual size. As the generating operation progresses, the tool spindle axis T moves on a path suggested on the right in Fig. 10 as an ellipse. The pivoting range of the tool spindle axis T is shown by an arrow 76. The movement from a starting position up to a final

position, which the arrow 76 indicates, approximately corresponds to the machine root angle pivoting of the work gear spindle axis W as applied in the conventional machine. However, according to Fig. 10, on the machine 10 according to the invention this process is a continuous turning of the tool spindle axis T about the orientation axis O from a point 78 up to a point 80. The ellipse, which is viewed from the left in Fig. 10, illustrates the range given by the arrow 76 between the points 78 and 80, in which the swivel drum 44 must rotate so that the predetermined relative rolling motion between the work gear 22 and the tool 42 can be achieved. In the meantime, the position of the work gear spindle axis W, which is set at the value Γ_{max} minus κ, remains fixed. The work gear spindle axis W generally sets up a reference plane with the orientation axis O. The pivot axis P is perpendicular to the reference plane. The machine root angle Γ here is measured against the Y axis, which is at right angles to the orientation axis O in the reference plane. The tilt angle κ is measured against the orientation axis O. The tilt angle κ in the machine 10 lies within a range of greater than 0° and up to 35°, and preferably from 5° to 15°, and is preferably 10°. There is preferably no motion reversal in the movement of the tool spindle axis T around the orientation axis O. The generating gear axis (not shown), which performs a wobbling motion in space in the conventional multi-axis bevel gear generating cutting machine according to EP-B1-0 374 139, merely moves in a vertical plane in the machine according to the invention.

Please amend paragraph **[0058]** as follows:

[0058] In carrying-out the CNC-controlled method according to the invention, the work gear spindle axis W and the tool spindle axis T are moved translationally in the three directions X, Y, and Z. In the embodiment described here, the work gear spindle axis W is adjusted in its angular position Γ about the vertical pivot axis P for a bevel gear to be machined on the machine, and this machine root angle Γ is maintained during generating cutting machining. Then, the tool spindle axis T is continuously swiveled about the orientation axis O with a fixed, non-adjustable tilt angle κ against the orientation axis O, for all bevel gears to be machined on the machine 10. In this connection, the machine root angle Γ and the tilt angle κ are selected so that a predetermined rolling motion can be achieved between the work gear 22 and the tool 42 by the continuous swiveling.

Please amend paragraph **[0059]** as follows:

[0059] In the above method, just as in the machine 10 described above, the work gear spindle [[W]] 18 and the tool spindle [[T]] 38 can be interchanged. In other words, the work gear spindle 18 could be located on the second spindle support 24 and the tool spindle 38 could be located on the first spindle support 14. In addition, the horizontal guides of the spindle supports could be arranged on a vertical base instead of a horizontal one.

Please amend paragraph **[0063]** as follows:

[0063] In Fig. 6 the tool 42 is shown in a position for a tool change. To load the machine 10 with a new tool 22, the first spindle support 14 in Fig. 6 is further rotated until the work gear spindle axis W is parallel with the horizontal guide 37, and the carriage 36 is moved to the right.